

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (previously amended) A microcontroller, comprising:
a circuit comprising ~~at least one of~~ an analog circuit and a digital circuit
wherein said analog circuit comprises an analog input and an analog output and
said digital circuit comprises a digital input and a digital output;
a wirebond pad;
a processor; and
a switching circuit that selectively connects ~~the circuit~~ at least one of said
analog input, said analog output, said digital input and said digital output to the
wirebond pad under control of the processor.
2. (currently amended) The ~~apparatus~~ microcontroller according to claim 1, wherein the
analog circuit comprises a configurable analog circuit block.
3. (currently amended) The ~~apparatus~~ microcontroller according to claim 1, wherein the
digital circuit comprises a configurable digital circuit block.
4. (canceled)
5. (canceled)
6. (canceled)

7. (currently amended) The apparatus microcontroller according to claim 1, wherein the switching circuit comprises a tristate analog buffer amplifier coupling the analog output to the wirebond pad, and wherein the analog output is switched by tristate control of the tristate analog buffer amplifier.

8. (currently amended) The apparatus microcontroller according to claim 1, wherein the switching circuit comprises an analog buffer amplifier in series with an analog switch coupling the analog output to the wirebond pad, and wherein the analog output is switched by the analog switch.

9. (currently amended) The apparatus microcontroller according to claim 1, wherein the switching circuit comprises an analog switch coupling the analog output to the wirebond pad, and wherein the analog output is switched by the analog switch.

10. (currently amended) The apparatus microcontroller according to claim 1, wherein the switching circuit comprises an analog switch coupling the analog input to the wirebond pad, and wherein the analog input is switched by the analog switch.

11. (currently amended) The apparatus microcontroller according to claim 1, wherein the switching circuit comprises a tristate analog buffer amplifier coupling the analog input to the wirebond pad, and wherein the analog input is switched by tristate control of the tristate analog buffer amplifier.

12. (currently amended) The apparatus microcontroller according to claim 1, wherein the switching circuit comprises a tristate logic gate coupling the digital output to the wirebond pad, and wherein the digital output is switched by tristate control of the tristate logic gate.
13. (currently amended) The apparatus microcontroller according to claim 12, wherein the tristate logic gate comprises an inverter.
14. (currently amended) The apparatus microcontroller according to claim 12, wherein the tristate logic gate comprises a buffer.
15. (currently amended) The apparatus microcontroller according to claim 1, wherein the switching circuit comprises a multiple input logic gate coupling the digital output to the wirebond pad, and wherein the digital output is switched by an input to the multiple input logic gate.
16. (currently amended) The apparatus microcontroller according to claim 15, wherein the multiple input logic gate comprises a NAND gate.
17. (currently amended) The apparatus microcontroller according to claim 1, wherein the switching circuit comprises a tristate logic gate coupling the digital input to the wire bond pad, and wherein the digital input is switched by tristate control of the tristate logic gate.
18. (currently amended) The apparatus microcontroller according to claim 17, wherein the tristate logic gate comprises an inverter.

19. (currently amended) The apparatus microcontroller according to claim 17, wherein the tristate logic gate comprises a buffer.

20. (currently amended) The apparatus microcontroller according to claim 1, wherein the switching circuit comprises a multiple input logic gate coupling the digital output to the wirebond pad, and wherein the digital ~~input~~ output is switched by an input to the multiple input logic gate.

21. (currently amended) The apparatus microcontroller according to claim 20, wherein the multiple input logic gate comprises a NAND gate.

22. (currently amended) The apparatus microcontroller according to claim 1, wherein the switching circuit comprises an isolation resistor isolating the wirebond pad from one of a digital input, an analog input and analog output.